

IB Biology

Internal Assessment

INVESTIGATING OSMOSIS IN POTATO

Aim: To investigate the effect of different salt solutions in potato cells.

Materials available:

Plastic cups	Potatoes	Tape
250ml Beakers	Knife/Scalpel	15 cm Ruler
Salt	Cork borer (0,8 cm)	Balance
Water	Paper towel	

General Instructions:

1. Divide in groups of 3
2. Label the plastic cups/beakers: 0%, 5%, 10%, 15%, 20%
3. All 5 solutions were prepared for you by me.
4. Add 100ml of each solution to the correspondent plastic cups/beaker
5. Cut 5 x 2cm potato pieces using the cork borer. Important: remove the peel from the potato cylinders.
6. Weigh each potato piece and record (**choose one specific person for this whole task – 0 min**). Place one potato piece in each solution (make sure you know which piece you are adding to each solution).
7. Make observations every 5 minutes for 30 minutes. Important: blot the cylinders with paper towel to remove excess water when measuring weight.
8. Each person should be responsible for at least two of the measurements:
0 min (already done in step 6): _____
5 min: _____
10 min: _____
15 min: _____
20 min: _____
25 min: _____
30 min: _____
9. We will pool data from the whole class to be able to do a more accurate analysis.
Highlight/identify the data YOU collected in your table.

You will be graded on:

- Data Collection and Processing
- Conclusion and Evaluation

Read the IB rubric before you start.

Your Lab Report must include:

- Title
- Results (quantitative and qualitative)
- Conclusion
- Evaluation